

Application No.:10/597,813

Docket No.: JCLA21512-R

**In The Claims:**

Please amend the claims as follows:

**Claims 1-18 (Cancelled)**

19. (Currently amended) A method of promoting successful regeneration and functional reconnection of damaged neural pathways in a mammal, comprising administering a therapeutically or prophylactically effective amount of ~~Use of~~ at least one oligonucleotide having a sequence at least 80% identical to a sub-sequence of SEQ ID NO 1 comprising 8 to 50 nucleobases, wherein said sequence is capable of hybridizing sufficiently with the region encompassing the translation initiation or termination codon of the open reading frame of the gene encoding Transforming growth factor  $\beta$  receptor II, or a region of the mRNA encoding Transforming growth factor  $\beta$  receptor II which is a "loop" or "bulge" and which is not part of a secondary structure ~~and which comprises administering a therapeutically or prophylactically effective amount of said oligonucleotide having said sequence, mimetics, variants, salts or optical isomers of said sequence to a mammal for promoting successful regeneration and functional reconnection of damaged neural pathways.~~

20. (Currently amended) The method ~~Use of at least one oligonucleotide according to claim 19, further comprising administering as well as~~ mimetics and variants thereof and/or at least one antisense compound comprising a vector allowing to transcribe at least one said oligonucleotide or a pharmaceutical formulation comprising at least one said oligonucleotide

Application No.:10/597,813

Docket No.: JCLA21512-R

according to claim 19 ~~for promoting successful regeneration and functional reconnection of damaged neural pathways.~~

21. (Currently amended) The method ~~Use of at least one oligonucleotide according to claim 20, wherein at least one said oligonucleotide and said as well as mimetics and variants thereof and/or at least one said antisense compound or said comprising a vector allowing to transcribe at least one said oligonucleotide or a pharmaceutical formulation are used comprising at least one oligonucleotide according to claim 19~~ for prophylaxis, therapeutic prevention and treatment of neurodegenerative, traumatic / posttraumatic, vascular/hypoxic, neuroinflammatory and postinfectious Central Nervous System disorders, as well as age induced decreases in neuronal stem cell renewal.

**Claim 22. (Cancelled)**

23. (Currently amended) The method according to claim 20 ~~Use according to claim 21,~~ wherein ~~the diseases associated with up-regulated or enhanced Transforming growth factor  $\beta$  receptor II levels or~~ the neurodegenerative disorders and neuroinflammatory disorders are selected from the group comprising: Alzheimer's diseases, Parkinson's disease, Creutzfeldt Jakob disease (CJD), new variant of Creutzfeldt Jakobs disease (nvCJD), Hallervorden Spatz disease, Huntington's disease, Multisystem Atrophy, Dementia, Frontotemporal Dementia, Amyotrophic Lateral Sclerosis, Spinal Muscular Atrophy, Spinocerebellar Atrophies (SCAs), or

Application No.:10/597,813

Docket No.: JCLA21512-R

other Motor Neuron Disorders, schizophrenia, affective disorders, major depression, meningoencephalitis, Multiple Sclerosis (MS), acute ischemic / hypoxic lesions, stroke, CNS and spinal cord trauma, head and spinal trauma, microangiopathic dementia, Binswanger' disease (Leukoaraiosis), retinal degeneration, cochlear degeneration, macular degeneration, cochlear deafness, AIDS-related dementia, retinitis pigmentosa, fragile X-associated tremor/ataxia syndrome (FXTAS), progressive supranuclear palsy (PSP), striatonigral degeneration (SND), olivopontocerebellar degeneration (OPCD), Shy Drager syndrome (SDS), age dependant memory deficits, neurodevelopmental disorders associated with dementia, Down's Syndrome, synucleinopathies, Superoxide Dismutase Mutations, Trinucleotide Repeat Disorders, trauma, hypoxia, CNS-ageing.

**Claims 24-39. (Cancelled)**